

DOCUMENT RESUME

ED 196 575

RC 010 723

AUTHOR Jennings, Don, Ed.
TITLE American Indian Health Careers Handbook. Third Edition.
INSTITUTION Association of American Indian Physicians, Inc., Norman, Okla.
PUB DATE 76
NOTE 70p.: For a related document, see ED 125 828.
AVAILABLE FROM Association of American Indian Physicians, Inc., 6801 S. Western, Suite 206, Oklahoma City, OK 73139.

EDRS PRICE MF01/PC03 Plus Postage.
DESCRIPTORS Admission Criteria: *Allied Health Occupations: *American Indian Education: American Indians: Career Guidance: Careers: *College Preparation: Higher Education: *Information Sources: *Medical Education: Secondary Education: *Student Financial Aid: Student Recruitment

ABSTRACT

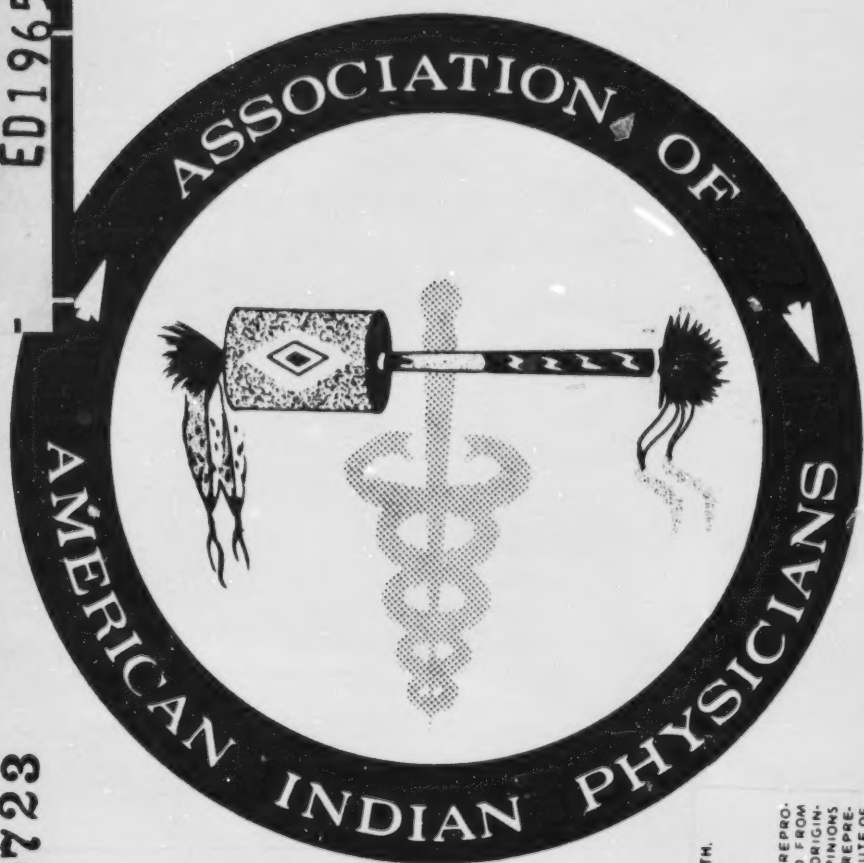
Designed to inform Indian students about health career opportunities, this handbook prepared by the Association of American Indian Physicians describes the great need for more American Indians as health professionals and gives information on specific health fields, preparation for health professions, and assistance available (financial and other). Health fields defined and briefly discussed are medicine, dentistry, pharmacy, nursing, veterinary medicine, osteopathy, podiatry, and public health professions. Areas in which health professionals may work are identified as private or public practice, community health departments, school health, mental health, research, rehabilitation, medical social workers, and hospitals. A section on preparing for a health career deals with secondary school through specialized training, explaining necessary courses and available financial aid. Steps to take during ninth and tenth grades are outlined, and a monthly schedule for high school junior and senior years covers required tests, job possibilities, college choices, catalogs, and financial aids. Health careers not requiring college graduation are treated briefly before a more thorough guide to college training and preparation, including how to apply to medical school. Programs for Indian students, financial planning tips, aid and information sources, and a recommended reading list are given. (RS)

* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *

RC 01 0723

ED 196575

HEALTH CAREER



Handbook

2

U.S. DEPARTMENT OF HEALTH,
EDUCATION & WELFARE
NATIONAL INSTITUTE OF
EDUCATION

THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL NATIONAL INSTITUTE OF EDUCATION POSITION OR POLICY.

**AMERICAN INDIAN
HEALTH CAREERS HANDBOOK**

Don Jennings, Editor

**Eula Doonkeen
Artwork**

**Third Edition
(Revised by Joye R. Swain)**

**Published
by**

Association of American Indian Physicians, Inc.

**1300 McGee Drive
Norman, Oklahoma 73069**

1976

THE AAIP

The Association of American Indian Physicians is a professional organization of American Indian and Alaskan Native physicians, founded in 1971 as a charitable, educational and scientific corporation for the following purposes:

- Provide a forum for the exchange of information between American Indian physicians.**
- Recruit American Indian students into the health professions.**
- Provide consultation to governmental and other agencies about American Indian health matters.**

The Association has launched a major recruitment program to bring many more American Indians into the health professions, including a prominent and immediate concern of the Indian community about physician shortages. In cooperation with the Bureau of Health Resources Development of the U.S. Department of Health, Education, and Welfare, the Association currently provides supportive services to American Indian students seeking to enter the health professions. The Association provides counsel to students regarding career information, identifies professional schools seeking to recruit American Indian students, identifies financial resources for student use, and maintains support of students throughout their education. The principal function of the organization is to serve the Indian community.

EXECUTIVE BOARD

- E. R. Rhoades, M.D. (Kiowa), President**
- Linwood Custalow, M.D. (Mattaponi), President-Elect**
- Gerald L. Ignace, M.D. (Coeur d'Alene), Secretary**
- Leslie Collins, M.D. (Leni-Lenape), Treasurer**
- S. A. Chicks, M.D. (Stockbridge-Munsee), Immediate Past President**
- Johanna Clevenger, M.D. (Navajo), Immediate Past Secretary**
- T. S. Whitecloud, III, M.D. (Chippewa), Member-at-Large**

A SPECIAL MESSAGE TO AMERICAN INDIAN STUDENTS

During the past few years the members of the Association of American Indian Physicians, other health professionals and myself have been meeting with Indian students throughout the United States. At these meetings we hear the same questions raised time and again by students considering a health career. All of the students want to know:

- Why are there so few Indian physicians?
- What health careers are available to an Indian student?
- How can I find out about the different schools?
- Where can I get the money I need for school?

Invariably, the discussion leads to the standard remark--"No one ever told me about this." Consequently, the Association has assumed the responsibility of telling students, schools, agencies and leaders about the great opportunities for American Indian careers in the fields of health. The Association is deeply committed to inform and support every possible Indian student who may want to become a health professional.

The career itself is an awesome commitment. Yet, I have not met one American Indian health professional who would trade it for another career. The careers of health and the healing arts are ancient; they have been with us from the beginning and they are a part of our being. It is within each of us, regardless of our education, to care for our bodies and the well-being of our people. Thus, the commitment to the health professions is already very much a part of our lives. Given fullness and special training, we can concentrate upon the full-time practice of these arts and skills, even as the medicinemen who have gone before us, and as the few American Indian health professionals who have already been trained in their various career programs. Among this last group, some have already served the community for many years. Indeed, they are beginning to ask if others will be coming along to join them and carry on after they can no longer lead.

The decision about who will become the health professionals of the future rests in part with every American Indian. The students, of course, are the ones who will decide; each will decide

for himself and for the Indian community as well. It is expected the handbook will be useful to counselors, parents and tribal leaders. Nevertheless, it is especially addressed to the student who may wish to consider or complete a health career.

Hopefully, the handbook will come into the hands of Indian students throughout the land: in every village, on every reservation, in every city, and among every tribe. From its reading and use, it is hoped the knowledge and experience described in the handbook will be applied by each reader to his own needs. It is expected the handbook will be shared among friends, family and classmates. If the members of the Association or the staff from our offices cannot visit the school of each student, it is intended that the handbook, to that extent, will speak on our behalf. The Association was formed and the handbook was prepared to provide information and answers to the questions most frequently asked.

The Association hopes that many American Indian youth will find the information helpful and will be encouraged to seek careers in the health professions.

Don Jennings
Executive Director
Association of American Indian
Physicians, Inc.

TABLE OF CONTENTS

	Page
PART I.	
THE NEED FOR AMERICAN INDIANS AS HEALTH PROFESSIONALS	1
PART II.	
CAREER OPPORTUNITIES IN THE HEALTH PROFESSIONS	4
Section A. The Health Fields	4
1. Medicine	4
2. Dentistry	5
3. Pharmacy	6
4. Nursing	7
5. Veterinary Medicine	8
6. Osteopathy	10
7. Podiatry	11
8. Public Health Professions	12
Section B. Professional Practice and Health Service Agencies	14
PART III	
PREPARING FOR THE HEALTH PROFESSIONS	20
Section A. Secondary School Preparation	20
Section B. Health Careers Not Requiring College Graduation	26
Section C. College Level Training and Preparation	27
Section D. Admission Into The Health Professions Schools	29
Section E. Special Indian Programs	35
Section F. Financial Planning	36
PART IV.	
WHERE TO OBTAIN ADDITIONAL ASSISTANCE	49
Section A. Counseling and Advice	49
Section B. Additional Sources of Information	51
Section C. Recommended Reading List	56



PART I

THE NEED FOR AMERICAN INDIANS AS HEALTH PROFESSIONALS

At the present time more than four million professionals serve the health needs of the entire United States population. Their work is an ancient calling to safeguard health and help people enjoy life. Their methods, however, are often modern. Indeed, within the past 10 to 15 years the concept of health care has changed: it is now viewed as the right of every citizen, and recently enacted federal legislation has generated an unprecedented demand for medical services. Unfortunately, there aren't enough trained health workers--doctors, nurses, dentists, therapists and others--to fill this demand, thereby adding to the ever-increasing health manpower shortage.

This shortage has long been acute among the American Indian peoples, who number nearly one million persons. President Nixon advised in his message to Congress on July 8, 1971, that according to every standard, the American Indian people were the most disadvantaged of any people in this country. He said:

"Despite significant improvements in the past decade and a half, the health of Indian people still lags 20 to 25 years behind that of the general population. The average age of death among Indians is 44 years, about one-third less than the national average. Infant mortality is nearly 50% higher for Indian and Alaskan natives than for the population at large; the tuberculosis rate is eight times as high and the suicide rate twice that of the general population. Many infectious diseases such as trachoma and dysentery that have all but disappeared among other Americans continue to afflict the Indian people. . ."

The need for competent, dedicated and educated people to provide professional health care is obvious. Nevertheless, the numbers of Indian personnel in the various professions and allied health professions is virtually nil. According to every standard,

there are not nearly enough licensed and educated Indian people to raise the health levels of our population group. According to federal government statistics, recent estimates of the following health professions are as follows:

Career Category or Area	National Total (Approximate)	Number of Amer. Indians (Approximate)	Number of Amer. Indians Needed (Based on 1 m. pop.)
Population base	210,000,000	850,000	
Medical Doctor (M.D.)	340,000	56	1,475
Doctor of Osteopathy (D.O.)	14,000	1	86
Doctor of Dental Surgery (D.D.S.)	120,000	8	540
Doctor of Veterinary Medicine (D.V.M.)	25,000	2	112
Doctor of Optometry (O.D.)	18,000	2	84
Doctor of Pharmaceutical Medicine (Pharm. D.)	125,000	30	562
Doctor of Podiatric Medicine (D.P.M.)	8,000	0	42
Nurses	750,000	400	3,000

In addition, only 130 American Indians are medical or dental students, a tiny percentage of more than 44,000 such students in this country.

The need for American Indians to become health professionals is enormous. The need becomes emphasized even more by the future needs of the Indian community. Nearly every undertaking in Indian life—education, housing, employment, transportation, art, or other—can be accomplished to a greater degree by a healthy people. For this reason alone the need for American Indians as health professionals is deserving of everyone's fullest concern.

The role of the Indian health professional within the community is complex. In the minds of the community, the physician or nurse is much more than an individual administering the arts of his profession; he is the key provider to the entire well-being of the community and the leader who will find our fullest trail into the dawning day. As health professionals, American Indians are revered to just as the medicinemen of old. They will be expected to demonstrate and provide the highest quality of life—spiritually, physically, emotionally, and according to the finest values of

the community. The need for this leadership is very great. Young students should be especially mindful of this responsibility and fully understand their role as Indian health professionals within the community, regardless of their specific health career choices.



PART II

CAREER OPPORTUNITIES IN THE HEALTH PROFESSIONS

The business of health is everybody's business and the career of a health professional touches nearly every aspect of our daily lives. As a field of service, the health professions are among the oldest and most diversified known to man. The opportunities for a successful career are vast, and unlimited. Whether in patient care, disease prevention, public education, epidemic control, research or administration, there is a great need for talented and dedicated men and women. Some may enjoy the mysteries of science and myth. Others have the gift of understanding. Some like to do things with their hands, while others like to instruct and teach. For American Indians, especially, there are many opportunities in the health fields.

Section A. The Health Fields

The health professions include many fields of service and specialty--far too many to describe in this small handbook. Yet, they all basically relate to one another and serve to support the highest possible standard of health within the community.

Medicine

Opportunities continue to abound in this ancient calling. Whether in private practice, research, administration, public health, teaching or military service, the career as a doctor of medicine is extremely fulfilling. The career is demanding, as the services of the physician are always necessary. With modern facilities and highly trained skills the physician performs his practice of medicine, as the professional concerned with both preventive and restorative medicine.

The profession requires of its members many skills, including intelligence, ability to make independent judgments, a willingness to accept personal responsibility, and the capacity to make decisions.

The profession also requires considerable physical and emotional strength. Those who select this profession should be very good students. Indeed, study continues throughout the life of one's career, for to be a good physician is to be a good student, adding constantly to one's knowledge and professional capability. Physicians must be especially well-trained in the sciences and they must also be in good health: Not only the study of the profession, but the practice of medicine demands one's constant attention.

Doctors most often deal with pleasant circumstances. Yet, the physician's work may occasionally require him to work in difficult situations. However, a good doctor must be able to deal effectively with all situations. For those with special talents, the career of medicine is extremely rewarding.

Many also find special rewards through concentration in a field of special interest. These 34 recognized specialty areas include:

Anesthesiology	Pediatrics
Colon and Rectal Surgery	Physical Medicine and Rehabilitation
Dermatology	Plastic Surgery
Family Practice	Preventive Medicine
Internal Medicine	Psychiatry and Neurology
Neurological Surgery	Radiology
Obstetrics and Gynecology	Surgery
Ophthalmology	Thoracic Surgery
Orthopedic Surgery	Urology
Otolaryngology	
Pathology	

There are, in addition, many other health careers which play an equally important role.

Dentistry

The dental professions likewise offer unlimited opportunities. The dentist and his staff are primarily concerned about the oral health condition of the public and assist individuals in preserving their teeth. The dentist is trained in the diagnosis and treatment of the oral cavity and associated parts. He is also trained in the restoration of defective or missing teeth and tissue, and very actively emphasizes prevention of dental problems.

The modern dentist must be able to work with other people. He will often receive the assistance of a dental hygienist, a dental assistant and the dental laboratory technician. Virtually, no American Indians work in these fields.

As with medicine, the opportunities extend from private practice (most often selected) to research, teaching, public health education and/or administration. The training, aptitudes and skills required of this profession are similar to those of medicine, except, the dental profession necessarily requires exacting coordination of the eyes and hands.

The eight recognized specialties in dentistry are:

- Endodontics (root treatment).
- Oral Pathology (diseases of the mouth).
- Oral surgery (surgery of the mouth).
- Orthodontics (teeth straightening).
- Pedodontics (children's dentistry).
- Periodontics (treatment of the tissues or gums supporting the teeth and the underlying bone).
- Prosthodontics (making of artificial teeth or dentures).
- Public health dentistry (preventing and controlling dental diseases and promoting dental health through community efforts).

Whether the dentist selects private practice, an institutional position or public health service, he will find the investment in dentistry a good one.

Pharmacy

The pharmacist is a key member of the health services team. The skills of the pharmacist require his knowledge and understanding of the chemical composition and properties of all drugs, and how to prepare medicine. The field is rapidly expanding with great opportunity; as many as 75 percent of today's drugs were unknown only 10 years ago.

The area of pharmacy that an individual will choose depends upon his own personal goals, abilities, knowledge and personality. If he enjoys working with the public on a day-to-day basis, then

retail pharmacy may be his choice; most pharmacy graduates practice in retail pharmacy and work in drug stores or supermarkets. In addition to meeting the public prescription needs and medical needs, the pharmacist's duties may extend beyond the pharmacy into government, drug abuse programs, and many other areas. With his frequent and close contact with the public, the pharmacist is often the first health professional to come in contact with a person seeking medical help. His concern with the research, development, control and distribution of drugs makes him a vital member of his community.

Unlike his retail counterpart, the hospital pharmacist is mainly responsible for meeting the drug needs of the patient during his stay in the hospital. Here the pharmacist has a wide range of responsibility, in-service teaching and drug consultation with other health professionals. The hospital pharmacist has the opportunity of working with the doctors on a more personal level, and provides a very important contribution to the hospital health team. Other areas that may be of interest are public health pharmacy, pharmaceutical research, manufacturing and marketing.

In many ways, the career of a pharmacist builds upon certain aspects of traditional Indian healing practices and the use of certain herbs. Those interested in these practices might find a career in pharmacy extremely exciting.

Nursing

Nursing is by far the health career selected by the largest number of people. The opportunities available to American Indians in this career are both considerable and varied, whether as an aide, an orderly, a Licensed Practical Nurse, a Registered Nurse or a specialist in an auxiliary area of advanced nursing.

In the hospital, the professional nurse will have overall responsibility for the patient's nursing needs as prescribed by the physician. This care may include the changing of linen, feeding, bathing, giving medication, and other direct patient-care activities. Other nurses may have responsibilities of supervision and in-service teaching. In private practice, nurses may also assist in the clinic or the physician's office with the preparation of patients for diagnosis, performing miscellaneous bookkeeping or business

skills, and assisting the physician administer medications or dress wounds.

Other nursing fields include public health or field health nursing. Field health nurses go into the home, the school, and industry. Some industries and schools employ their own nursing staff to provide first aid treatment, conduct screening programs, and provide health education services.

The field of nursing also has its clinical specialties. For example:

Pediatric nurses specialize in caring for children.

Obstetric nurses care for mothers and new babies.

Psychiatric and mental health nurses care for mentally ill.

Rehabilitation nurses care for patients with chronic and disabling conditions.

Medical-surgical nurses care for patients before, during and after surgery, and in most types of illness.

Depending upon the nursing skills desired, the educational requirements beyond high school may range from one to six years. The R.N. programs normally require three or four years and the Baccalaureate program is strongly recommended. Some clinical specialists require considerable specialty training beyond the R.N. degree, in addition to some experience. Working conditions in nursing vary, but the career does not lend itself to standard business hours. Nursing must continue around the clock, and one's personal responsibilities will require careful arrangement to accommodate this important, although unusual, schedule.

Veterinary Medicine

Veterinary medicine is an autonomous profession, with over 30,000 doctors of veterinary medicine in North America, having its own system of education, licensure, and organization. As the profession has advanced scientifically and its members have become more numerous, the affairs of veterinary medicine have become increasingly complex. Not only are veterinarians actively engaged in primary health care delivery (diagnosis, treatment, and control of diseases among animals), but they are also key members in the nation's medical, public health, research and military teams.

Demands for veterinary medical services continue to rise. A recent report estimates that North America will need 44,000 veterinarians, or almost half-again today's number, by 1980. Yet, there are only two Native American veterinarians.

Veterinary medical schools require a minimum of either two or three years of pre-veterinary college work. Students must then complete four years of professional study at an accredited college of veterinary medicine. Graduates receive a doctor of veterinary medicine (D.V.M.) or veterinary medical doctor (V.M.D.) degree, and must then pass a rigid licensing examination before they can practice in any specific state.

The curriculum at a veterinary medical school is in many respects similar to that offered in medical schools. In fact, in some of the basic courses such as bacteriology, immunology, histology, and others the material is virtually identical in all fields of medicine. Only in the advanced courses do medical concepts and applications begin to be more specifically confined to the various species of domestic animals.

The veterinary medical profession provides certain unique services and knowledge that are indispensable to America and not duplicated by any other health profession. Some examples are: animal models of disease (comparative medicine), environmental health, food animal production, public health, animal research, and companion animal care.

Historically, veterinary medicine has contributed, through comparative medicine, to breakthroughs in human medicine. Studies on botulism, tetanus, and spinal anesthesia were among those pioneered by the veterinary medical profession. Soon to follow was significant work in the transmission of cancer, the description and early work on congenital muscular dystrophy, and the recognition and control of rabies. The maintenance of good public health standards and practice involves veterinary medicine directly with the human health professions. Veterinarians have long played a critical role in the prevention, identification, and eradication of more than 150 diseases transmissible from animal to man.

Veterinarians working in cooperation with the U.S. Department of Agriculture and the State Departments of Agriculture

are also responsible for organized animal disease eradication and control programs. By testing for and eradicating tuberculosis in cattle, the veterinary medical profession has significantly lowered the incidence of intestinal tuberculosis in man, which is caused by the same agent (*Mycobacterium bovis*). Veterinarians are responsible for supervising all meat inspection in the United States--assuring that the American consumer eats disease-free meats. Large animal practitioners prevent, control, and eradicate diseases of livestock and poultry, and insure that meat and meat products, as well as milk and milk products, are wholesome and disease free. This includes the responsibility for insuring that our food producing animals are maintained in the best of health and producing in an efficient manner.

Because the veterinarian is the backbone of our livestock industry, he is one of the most needed health professionals of the Indian people today.

Osteopathy

The educational principles and professional practice of osteopathic medicine are based on a system of therapy developed by its founders toward the end of the 19th century. This system stresses the importance of body mechanics to the health of the person and emphasizes the use of manipulation to detect and correct faulty body structure. In dealing with illness and injury, osteopathic medicine makes major use of manipulative therapy, combining it with the use of drugs, operative surgery, physical therapy, and other methods, depending on the individual diagnosis.

There are seven colleges of osteopathic medicine accredited by the American Osteopathic Association. Their graduates receive the degree of doctor of osteopathy (D.O.). Minimum entrance requirements for all seven colleges are three years of pre-professional college work in an accredited college or university. Though specific entrance requirements vary among the colleges of osteopathic medicine, in general they require that the undergraduate college (pre-professional) training should include chemistry, biology, physics, and English. The colleges urge prospective students to begin these subjects while they are still in high school.

During the first half of the professional training, basic science

subjects are taken, such as anatomy, physiology, pathology, bacteriology, immunology, biochemistry, histology, embryology, pharmacology, and public health. In addition, there is training in osteopathic principles, diagnosis, and practice, including manipulative therapy and other techniques. During the last half, the the curriculum includes clinical subjects and practical training in the osteopathic hospitals and outpatient clinics with which the college is affiliated.

Most members of the osteopathic medical profession are in private practice. The potential advantages of working independently and of increasing one's income with years and experience should be weighed against disadvantages such as long and unpredictable hours.

Podiatry

The podiatrist is a professionally trained footcare practitioner whose services supplement the medical care provided by the physician. Within his own field, the podiatrist is an active member of the health team. Since three out of four people have foot troubles, a very important need in health services is being filled by podiatry.

The podiatrist diagnoses and treats diseases and deformities of the feet, or tries to prevent their occurrence. The problems he deals with range from a simple corn to foot difficulties requiring special shoes or foot appliances. He consults with other medical specialists concerning further medical treatment.

Podiatrists must be alert to a patient's general health, too. Sometimes a disease like diabetes or hardening of the arteries will produce symptoms in the feet or legs. If the patient is not already under the care of a physician, the podiatrist will urge him to get medical treatment promptly. In turn, people with diseases that affect the feet may be sent by their physicians to a podiatrist for auxiliary care.

The podiatry field is far from overcrowded. Twenty-two million patients were served by podiatrists in 1970. The expanding population with its greater number of older people has resulted in an increasing demand for podiatrists. The podiatrist's practice ranges from office treatment and surgery to consultation with specialists in every area of health. Most podiatrists are self-em-

ployed, working in their own offices or in professional buildings with other specialists. Many others serve on the staff of hospitals and treatment centers, in government health programs, and the Armed Forces. Some teach in colleges of podiatry and some do research work.

The student interested in this field should obtain a list of the accredited colleges of podiatry from the American Podiatry Association and write to the school of his choice before starting undergraduate college work. He can then plan his bachelor's level courses to match the professional school requirements. Scientific subjects are emphasized in college as well as in the four years of professional study. Colleges of podiatry grant the degree of doctor of podiatric medicine (D.P.M.).

Although most podiatrists give general foot care to a general clientele, some become particularly interested in specialized work. This might be with children, older people, or industrial workers, or with the treatment of foot deformities. Some podiatrists may prefer to teach, either full- or part-time, or do research on foot ailments. Men and women with top qualifications sometimes act as consultants for various private and government health agencies, and for hospitals.

Public Health Professions

The numerous public health professions are specialty careers developed to emphasize particular needs of the public at large, or its distinctive groups, such as Indian tribes. In nearly all instances, the public health professionals work with representatives of the other health fields serving the important public health needs. While the professionals do not directly deal in patient or individual health care, they are concerned about common and genuine matters inherent in the health condition of the public.

The public health professions commonly include hospital administration, health education, environmental health, sanitation, epidemiology, and public health administration.

The public health administrator is the administrator of organizations engaged in the delivery of health care services on a local, state or reservation basis. His responsibilities include the direction of program planning and development, fiscal management,

personnel, and other executive functions. Many other members of the public health professions serve at his direction.

The hospital administrator is another public health official; he is the chief executive responsible for the orderly function and operation of the entire hospital and its programs. He establishes procedure and provides the supportive services necessary to the professionals and patients using the hospital. The hospital administrator must be capable of executive leadership and well equipped with organizational skills. Those American Indians considering a health career and who have considerable skills at organization, but who do not prefer the field of medicine, would perhaps find this field most appropriate to their skills.

The public health educator works among the community, developing their awareness and understanding of issues in health-related matters. The health educator is sometimes closely affiliated with the local schools and often provides health education leadership to other community programs. Individuals who serve in this profession must possess the interests and talents of both a teacher and a community worker. It is believed that many American Indian youth would be so inclined.

Sanitation, and epidemiology are public health professions closely allied with environmental health considerations. These professionals are all deeply concerned with the transmission and eradication of communicable disease, epidemic and public disasters. The work of these professionals includes pollution, public safety, and population behavior. In many ways, the close relationship between the American Indian peoples and their environment would make these professional areas natural careers for some individuals. Understandably, American Indians have found satisfying health careers in these professions.

Indeed, the public health careers, collectively, have witnessed a considerable American Indian enrollment during recent years. Considerable opportunity prevails and the need is unlimited. For those individuals anxious to work more with groups of people, this may be the appropriate health career. Some of the public health careers can be initiated with a college education. The master's of public health (M.P.H.) degree, however, is strongly recommended and often required. The training is so important in these fields that one often finds doctors of medicine, dentistry and veterinary medicine returning to school to obtain the M.P.H.

Section B. Professional Practice and Health Service Agencies

Whatever health field an individual selects for his professional career, as an American Indian he will experience considerable opportunity to practice his profession in a variety of distinct but alternate ways, through a variety of agencies, and in a host of different locations. To assist each individual develop most completely his own appropriate health career plans, it is important that these alternatives be described.

Private Practice

Many health professionals offer their specialty to the public through private practice. The doctor, for example, often has a private practice and serves most of his patients at that office or at a private clinic, which may be affiliated with a nearby hospital. In many instances, hospitals in this country are privately administered as well. This form of practice in some ways allows for the professional to provide his services in a manner most appropriate with his personality and style. Private practice necessarily involves the features of any business such as finance, purchasing, record-keeping, etc.

Usually, the doctors are not salaried and frequently earn as much or as little as the practice in their office can produce. While the private practice of medicine, dentistry, and veterinary medicine is very common, this form of service has been generally absent from the reservation communities. American Indians considering a health career may wish to consider this mechanism for the practice of their profession.

Public Practice

This practice is well-known to much of Indian America, since the Public Health Service and the Indian Health Service operate in this manner. In these programs professionals are usually salaried, and their services are provided through a predetermined program. County programs, veteran's hospitals, and state institutions are examples of this service. Although many people are not acquainted with public practice, a large number of health professionals work in this manner, and public agencies have numerous programs in the public health professions. Compared to private practice, public practice is perhaps more common to the members of the American Indian community.

Community Health Departments

As the official health agency for a particular city or county, the local health department is charged with protecting the community health through such measures as safeguarding the purity of food and water supply; promoting and providing inoculations for various diseases; controlling mosquitoes, vermin, rats, and other disease-carrying animals; controlling communicable diseases; controlling possible contamination or disease from sewage or air pollution; educating the public on disease control and health maintenance; providing maternal and child welfare clinics; providing some services for mental health and mental retardation.

In addition, the local health department acts as a connecting link, relating local public health activities to those of the State health department, and through the State, to the U.S. Public Health Service. Because its responsibility covers the entire community, the health department also serves as a center for health information and health education. It is the local outpost in a nationwide fact-gathering system through which health statistics are compiled. The department also has the responsibility for keeping the local population informed about new health developments and encouraging them to use new services.

Behind these services are a number of supportive services. One is the public health laboratory. Its activities include, for example, testing for the sources of communicable disease, traces of radiation, and causes of pollution in air, water or food. In the larger health departments, the laboratories are also engaged in research.

In the local health department, many opportunities are open to physicians, dentists, nurses, veterinarians, sanitary engineers, statisticians, educators, nutritionists, and other professionals.

School Health

School health covers a wide area. It is concerned with maintaining a safe and healthful school environment--in the classroom, laboratory, library, lunchroom, gymnasium, school grounds, and athletic field. It is concerned with preventing accidents and meeting health emergencies.

It takes responsibility for a variety of preventive and protective services--from checking on requirements about immunization against certain communicable diseases to the administering of sight and hearing tests. It is constantly on the alert, through the teachers and the school nurse, for the first sign that an individual student may be getting sick. It also is responsible for health education.

Of the school health specialists, school nurses are the most familiar, but others would include school physicians, dietitians and nutritionists, school dentists and dental hygienists, psychologists, social workers, mental health specialists, and those who provide services for exceptional children. In the community at large, school health also has close cooperative relationships with all other health agencies as well as with parents' organizations and other community groups.

Frequently, the sponsor of school health programs is the school itself, whether public or private. Further information about these opportunities could be obtained from the school itself. This entire area is extremely underdeveloped throughout the American Indian community and will undoubtedly experience considerable growth in the near future.

Mental Health

Psychiatry, psychiatric nursing, psychiatric social work, and psychology are the mental health professional fields which deal with personality problems and behavioral disorders, especially those involving the emotions. Occupational therapists and psychiatric aides round out the team for treatment, care, and research to find out what promotes mental health or causes mental illness.

Generally speaking, most mental health services are provided under the auspices of some established program, often by various private and public health service agencies, although there are some examples of private programs.

Research

Many different organizations are involved in health research. Universities, especially those with strong programs in the health

professions, are major health research centers. Such programs can draw upon all the university resources in the physical, biological, and social sciences as well as in medical and health practice. University teaching hospitals and other large hospitals are also involved. On public health problems, State health departments and some local health departments carry on a wide range of projects.

The major Federal agency for health research is the Public Health Service, operating mainly through the National Institutes of Health. In 1971 the United States spent \$3 billion for medical research, of which two-thirds came from the Federal Government.

Rehabilitation

The purpose of rehabilitation is to help people disabled by illness or accident to make a place for themselves as useful workers, family members, and citizens. Accomplishing this requires a wide assortment of services. Medical care is needed to overcome or to compensate for the disability; training to prepare the individual for a suitable occupation, and guidance to help him get established in a job and keep it.

Providing the right combination of services is often a complicated task. The problems involved in rehabilitation have to do with every kind of disability--crippling diseases and accidents, disabling chronic conditions, like tuberculosis or heart disease, loss or limitation of sight, speech, and hearing, or mental illness.

Members of the rehabilitation team include the physician, vocational rehabilitation counselors, occupational therapists, nurses, physical therapists, orthotists and prosthetists, psychologists, social workers, speech pathologists, and audiologists. Also, consultation to disabled homemakers or specialized therapy is offered by corrective therapists, educational therapists, manual arts therapists, music therapists, and recreational therapists. These highly skilled members of the health services team assist in the treatment of numerous disorders through such therapeutic techniques as exercise, massage, application of heat, light and water or use of mechanical and scientific devices.

Medical Social Worker

In working closely with physicians, therapists, nurses and other

specialists, medical and psychiatric social workers concentrate their efforts at solving all types of personal or family problems associated with illness, thus paving the way for early recovery and maximum rehabilitation. Gathering and interpreting pertinent information about the individual patient's social situation and his pattern of adjustment is the job of the medical social worker. This information guides the physician in his understanding and treatment of the illness.

Being expert in the field of human relations, the medical social worker uses his knowledge, skills and judgment to help the patient and his family find practical ways of overcoming social, emotional and economic problems. He frequently calls upon employment counselors, child placement agencies, lawyers, teachers and other specialists whose services are required.

Medical social workers most often practice their profession at hospitals, clinics, and other medical facilities. Those with special competence and wide experience also serve as administrators and consultants or in community organization activities which encompass all types of medical service programs. Some serve on medical service programs. Some serve on medical school faculties and some also help teach nurses, hospital administrators and public health personnel.

Hospitals

Many health professionals work in hospitals. Some hospitals, like the small rural community hospitals, are nonfederal, short-term, general hospitals, of which there are nearly 6,000 throughout the United States at the present time. On the other hand, some hospitals have become a complex medical center, very strategic in the delivery of quality care to a large community. Larger hospitals today are very sophisticated and highly departmentalized institutions, whose concern is not only with the primary task of providing medical care to individuals, but also with a concern for the training and education of health professionals, the development of medical research projects, and providing leadership throughout the community in areas of the various public health interests. Because hospitals play a very major role in the provision of health care, they are one of the nation's largest employers.

Some hospitals or health care treatment facilities are designed for the special needs of patients and treat only patients of those particular conditions such as TB or mental illness. Others are organized to accept patients only of certain ages, such as children's hospitals. Nevertheless, the hospital is only one of numerous institutions, organizations and agencies which sponsor opportunities for the practice of various health professions.



Edna Lookeer

PART III

PREPARING FOR A HEALTH CAREER

Preparation for a health career requires planning, attention and time. The Association of American Indian Physicians feels that some Indian students lack the support and information needed to prepare themselves for entering health studies.

The following is designed to assist Indian students who are interested in entering a health career, but do not understand just how to go about preparing themselves. It will guide the student through his secondary education and specialized training and help him understand what courses he should pursue and where to seek financial aids.

Section A. Secondary School Preparation

Whether in junior or senior high school, the American Indian student who believes he wants to work in a health career should seek assistance in planning his high school studies, so he will be well prepared for the training programs which lie ahead. Often the student can obtain this assistance from his advisor or favorite teacher.

For those students who wish to enter a health career which does not require a college degree, there are many opportunities and preparation should begin in high school. (See Section B. Health Careers Not Requiring College Graduation)

For students who seek a health career requiring the completion of a college education (as most health careers do), there are many things to consider, such as: the kind of college, the requirements for the career, the curriculum, and how to pay for the studies.

Students interested in a professional health career must concentrate on the following courses: chemistry, biology, algebra, geometry, trigonometry, physics, English and speech. These courses are usually required to enter college courses to be a nurse, health information specialist, chemist, dietitian, doctor, and others. If an Indian student learns his school cannot offer these subjects, he should immediately discuss this with his advisor, his

parents and his community leaders. Perhaps he will need to change schools or take some courses with a tutor or by correspondence.

Sometimes the student will be discouraged, however, if he or she is interested in college or a professional career, then he should continue to work towards his goal and seek help from other sources.

American Indian high school students should be aware that aptitude tests must be taken to enter professional health careers such as medicine, dentistry, and veterinary medicine. High school students should begin to concentrate on problem areas such as vocabulary, test taking, and reading in high school. A larger vocabulary will help you express your ideas more clearly as well as improve your scores on high school and college aptitude tests.

In addition to one's classwork, the prospective health professional is strongly encouraged to participate in available extracurricular activities, including science clubs, future physicians clubs, Candy Strippers, medical explorer posts, etc. These clubs permit an even closer acquaintance with the health professions. Often working with community health professionals, the students learn more about the real work of these people and their profession. If there are no clubs like this in one's school, the interested student may wish to discuss the organization of one with his advisor. More information about such clubs is available from the following organizations:

American Medical Association
535 North Dearborn
Chicago, Illinois 60610

National League for Nursing
10 Columbus Circle
New York, New York 10019

American Academy of
Family Physicians
1740 W. 92 Street
Kansas City, Missouri 64114

Exploring Division
Boy Scouts of America
New Brunswick, New Jersey
08903

AAIP has worked out a schedule which is designed to help students who plan to enter a career which requires college preparation. Students who follow these recommendations and do some of their own research will increase their chances of being accepted at a college and of receiving financial aid. But the student should also

seek advice about the specific career or school he is considering.

9th Grade

This year's grades will be the first ones on the academic record which will be sent to all colleges where the student applies. Most colleges base their admissions decisions on work in grades 9 through 11, and part of grade 12, so it is imperative that the student begin now to do his best in all school subjects.

- Spend some time each day trying to improve reading comprehension, speed, and vocabulary. Study a few new words each day.
- Get involved with school and/or community activities because colleges are interested in well rounded individuals who have engaged in some extra curricular activities. For veterinary medicine, participation in the 4-H club and boy scouts is important (NOTE: Veterinary medicine admissions committees consider these two groups as very important experience and they are considered a "plus" on the student's records).
- Discuss college plans with parents and guidance counselors. If possible talk to an Indian guidance counselor or AAIP. Find out from counselors what high school courses are necessary to satisfy basic college requirements.

10th Grade

- Begin to make some serious decisions about life's work. This is a first step in deciding on a college.
- Continue to learn about occupations that fit the student's abilities and interests.
- Go to the library and read about possible careers.
- Talk with counselors, teachers and people who work in the field. Perhaps write to an Indian lawyer or physician or dentist to get a personal insight on what it is like to be a professional.
- Continue involvement in a school club or in community activities.
- Using the college guidance materials in school or public library, make a list of possible colleges to attend.
- Check the entrance requirements of these schools and verify with counselor that the student's high school program will satisfy college requirements.

11th Grade

Remember that this is the last full year to make the good grades that colleges consider for admission. Work to improve grades.

SEPTEMBER

- Register with school counselor for the Preliminary Scholastic Aptitude Test (PSAT) and National Merit Scholarship Qualifying Test (NMSQT) which will be given in October or November.
- Study the PSAT/NMSQT student bulletin. It will give examples of the kind of questions that will be on the test.
- Check with counselor once again to see that student's courses meet basic college requirements.

OCTOBER

- Take the PSAT.

NOVEMBER

- Start narrowing college choices down to about five or fewer.
- Find out from counselor which college entrance exams these schools require (SAT or ACT). Find out what these exams are.
- Consult the college catalogs in the school library. If the catalogs are not available, write to the colleges for them.

DECEMBER

- Consider applying for a special college preparatory program for next summer. See guidance counselor for suggestions.

JANUARY and FEBRUARY

- Start lining up a summer job. If the student is interested in a professional health career then experience at a health care delivery facility would be a good suggestion. The Association of American Indian Physicians keeps lists of summer programs for American Indians interested in health careers.
- Check deadline dates for special scholarship competitions. Ask about all of the available scholarships and grants. Consult the Bureau of Indian Affairs scholarship representation for applications. See "Scholarships for American Indians."

MARCH and APRIL

- Student should make a copy of parents' federal income tax and keep it in a safe place to have certain information from it when applying for financial aid.
- Finalize summer plans or if necessary, summer school plans.

MAY and JUNE

- Discuss preliminary choices of colleges with counselor.
- Firm up course schedule for senior year.
- Obtain a summer reading list to prepare in next year's courses and to increase your reading ability, speed, and vocabulary.

JUNE to SEPTEMBER

- Save money from a summer job to put toward ACT or SAT fees and college applications.
- If possible, the student and his parents should visit the college he hopes to attend.
- Attend summer school if all the required courses are not available the senior year.

12th Grade

SEPTEMBER

- Select three to five colleges. Write for catalogs and applications for admission. If the address of the college is unknown, the letter will be delivered if the name of the college, city and state are correct on the envelope. Be sure the student meets the admission requirements. The college selected by the American Indian health careers student should be accredited and able to provide a strong foundation in natural sciences, social sciences, humanities and communication skills.
- Contact BIA Area Office for certificate of blood quantum and BIA grant application.
- Study the catalogs for courses and major offered and sources of financial aid. Consider tuition, size, location and quality of instruction.
- Make a list of possible financial aid sources. Write for applications.

OCTOBER

- Register for the ACT, SAT and Achievement Test. If the student cannot afford the test fee, ask about obtaining a fee waiver.

- Study the student handbook on the SAT or ACT test to become familiar with necessary preparation for it and the kinds of questions that might be involved.

NOVEMBER

- Take the SAT or ACT or both if necessary.
- Fill out college admissions applications. If the student has any question consult the guidance counselor. Mail the application now, along with all necessary forms. (Keep in mind the deadlines).
- Fill out applications for college financial assistance and for other assistance in the form of grants, scholarships or loans from foundations, philanthropic organizations, state or federal programs. Check the deadlines.

DECEMBER

- Check college handbooks to make sure the student has done everything necessary for admission and for financial aid.

JANUARY

- Check with counselor and teachers to see that high school grades, letters of recommendation, and transcripts have been sent to colleges.
- Contact colleges to make sure they have received all applications and letters of recommendation.
- Ask counselor or a local agency about summer jobs or summer programs of college preparation.

FEBRUARY

- Submit BIA and other federal grant applications.
- Have mid-year grades sent to the colleges that require them.
- Look for summer job.

MARCH

- College acceptances are usually sent out during this time.
- The student will be contacted by the college's Office of Financial Aids, regarding the type of financial packet for which he or she is eligible. See "Financial Aids."

APRIL and MAY

- If colleges have not notified the student of their decisions on admission and financial aid, inquire.
- Inform the school counselor about admission and financial

aid correspondence.

- Have high school send final transcripts to the college the student will attend.
- If no schools accept the student, try again for mid-year acceptance at the same schools and also some community and junior colleges.

JULY

- Try to attend a session of summer orientation at the college the student is accepted. The summer freshman orientation sessions are designed to introduce the campus and all its facilities and programs, such as: The Office of Financial Aids, Registrant's Office of Academic Affairs—providing academic counselors, tutoring labs, counseling center.

Section B. Health Careers Not Requiring College Graduation

There are many health careers which do not require a college degree and even a few which do not require high school graduation. For example, high school graduation is usually not required to be a nurses aide or ward clerk and training is usually provided after the person is hired. On the other hand an x-ray technologist must complete high school and a formal course of training which may be offered at a local hospital or medical school.

Although almost all health careers require specialized preparation, many require only on-the-job training or short courses offered in vocational-technical schools, hospitals, or community colleges. Occupational-therapy-assistants, medical records technicians, operating room technicians, optometric assistants, and many others may receive their training this way. Programs may vary from a 3-month course for electrocardiograph technicians to a 3-year program for a dental hygienist.

Sometimes these courses can be taken at a state vocational-technical school during high school and can help fulfill requirements for high school graduation.

The Indian Health Service also offers training in numerous health career areas: community health representative (CHR), community health medic (CHM), dental assistant, licensed practical nurse, laboratory assistant, and medical records technician are a few. More information about these programs can be obtained by writing to the nearest IHS Area Director's Office.

The State Department of Vocational-Technical Education of his state can provide the student with a list of all state programs.

There are also private schools. Some of these schools are excellent, but others have low standards and high prices. Before signing an agreement to attend such a school the student should check with his State Department of Education and State Accrediting Agency to see if the school is accredited or not.

Scholarships are available through BIA, the VA, and some of the schools. However, as much of the preparation is on-the-job training, the student should not forget that a salary will be paid in these programs.

Section C. College Level Training and Preparation

Freshman Year

If the student plans to go into a profession like Medicine, Dentistry, or Podiatry, then he or she should start the process of planning upon your acceptance to college. Careful planning will enhance the possibility for acceptance into one of these professional schools. There are many people who have worked hard to develop pathways and educational opportunities for American Indian and Alaskan Natives, but the burden of accomplishment is on the student's shoulders.

The best advice is to talk and ask questions. Talk to upper classmen about their experiences. Talk with pre-health studies advisors each semester to avoid course deficiencies or other problems. Talk with professors (including lab instructors), so they will be willing to write letters of recommendation. talk...talk...talk...

The entire college program should be planned now, so the student is sure of meeting all requirements for advanced study. For example, the following are requirements of a typical medical school:

General Chemistry	1 year . . .	8 semester hours
Organic Chemistry	1 year . . .	8 semester hours
General Biology or Zoology	1 year . . .	8 semester hours
Genetics	1 semester . . .	3 semester hours
Physics	1 year . . .	8 semester hours
Literature	1 year . . .	6 semester hours
Calculus	1 semester . . .	3 semester hours

Pre-med students should consult the latest edition of Medical School Admission Requirements, (Association of American Medical Colleges, One Dupont Circle, N.W., Washington, D.C. 20036), and pre-dental students should read Admission Requirements of American Dental Schools (American Association of Dental Schools, 211 East Chicago Avenue, Chicago, Illinois 60611). At the present time, there are no comparable books for other health fields.

It is not necessary to buy these books. Most college libraries will have copies. By all means, read the introduction to this book now. It is an excellent source of general information on medical schools and preparation in the pre-med years.

This book also contains:

- a. Extremely pertinent information about each medical school, such as the price of tuition and the deadline date for applying.
- b. Mailing addresses to all the medical schools.

And, don't forget that although it is true that medical schools do not make grades their sole criteria for acceptance, GRADES still are the main one.

Sophomore Year

The sophomore year is an exciting time. By the second year of college, the student should have chosen a major. Most future health professionals major in the various fields of science. Some health students, however, may choose to major in the social sciences or humanities. Those students inclined toward health administration may major in business. Most pre-meds major in biology, chemistry, physics or microbiology.

Advisors agree that majors should be chosen according to the individual's interest. Students should choose a major that will not leave them without any career alternatives in the event their professional schools reject them.

Having survived his first year in college, the prospective health professional often begins to wonder whether he should participate in extra-curricular activities. In moderation, such activities are not only enjoyable, but they may also be considered

by professional school admissions committees. One student, for example, was chosen for admission to medical school because he had worked on his college's newspaper staff as well as maintained a high grade point average.

At this point, the student should start thinking about specific professional health schools. He should write to some of them for catalogs. If he has the chance, he may wish to visit the campuses in his area.

Now is the time to prepare for admission to professional study.

Section D. Admission into the Health Professions Schools

The American Indian student seeking a professional health degree must continue his education beyond the college level. Thus, the Indian student seeking to become a physician must become admitted into medical school. Similar advice and procedures apply for other professional disciplines as well. Contrary to rumor or unfounded fears, it is not difficult for a qualified American Indian student to gain admission into professional schools. The college student who is prepared, dedicated and hardworking will receive favorable consideration by the professional school, and the American Indian who meets these same qualifications should expect no serious difficulty gaining admission.

To qualify academically for medical school, the undergraduate student should maintain a good scholastic record. But that does not mean he has to be an "A" student. The vast majority of freshman medical students in each of the past five years were "B" students.

Medical school admissions committees are aware that an "A" mark may be more easily obtained in one college than in another. They use scholastic achievement as only one—though an important—yardstick in measuring an applicant's capacity for the study of medicine. When other factors are equal, the student with higher grades clearly has the best chance for acceptance. A recent survey of medical schools showed that the majority prefer to consider only students with grades no lower than B-minus.

Some schools admittedly have different requirements than

others. Some meet their capacity sooner than expected; and some may not be inclined to encourage Indian students as much as others. The student should inquire how many Indian students are enrolled, how much financial assistance is available to Indian students, and what special program the institution provides for Indian students. If the student is unable to determine the experience and interest of the school in dealing with Indian students, he should not hesitate to inquire of the Association of American Indian Physicians or the Association of American Medical Colleges. It is clearly an advantage for some Indian students to attend schools where they will have Indian classmates.

Whatever his choice, each student must realize that his acceptance into the graduate program represents the expectation of the institution that the student will both graduate and become a successful health professional. Likewise, the student should expect that he will successfully graduate from the program and uphold his career responsibilities.

The American Indian student planning for his graduate training should apply to the professional school of his choice approximately one year prior to the term for which he intends to enroll. At the present time, for example, medical students on the average apply to six medical schools each.

Junior: Year

Seriously think about specific medical schools. There are numerous factors to consider in deciding where to apply.

- a. Area, quality of the school, chances of admission, whether it has a minority student program, financial aid, tutoring, etc. Start talking to people about this.
- b. For detailed information about medical schools with minority programs and the number of minority students accepted at each medical school, we recommend the latest edition of Minority Student Opportunities in The United States Medical Schools. Copies are available at all United States medical schools or can be ordered from the Association of American Medical Colleges, One Dupont Circle, N.W., Washington, D.C. 20036.

It is essential to get letters of recommendation for medical school early in the junior year. Letters of recommendation are usually required from professors in the following classes:

- 1 in Chemistry
- 1 in Biology
- 1 in Physics
- 1 in Humanities or Social Sciences

When selecting professors for letters of recommendation, select those who know and like the student. This increases the probability of getting good letters of recommendation.

If the college has a pre-med advising office, some information the committee needs is:

- a. Area of interest (pre-medical or pre-dental).
- b. Name—Marital Status
Address—Home and School
Telephone Number—School
- c. Activities—organizations, fraternity/sorority, hobbies, after-school and summer jobs during college years, etc.
- d. Transcript of grades and MCAT scores.
- e. Proposed College major
- f. Recent photograph
- g. Parents' occupation
- h. Names and addresses of four professors who can be contacted for reference, three from the natural sciences and one from the social sciences. Contact these professors before submitting their names for reference.
- i. State where student is a resident.
- j. List of medical or dental schools where student intends to apply, plus a stamped envelope for each school. DO NOT put a return address on the envelope.

Medical College Admission Test (MCAT). The medical college admission test is required for virtually all medical schools. It can be taken in the spring of the junior year, or in the fall of the senior year. When a student takes the spring MCAT, he is eligible for consideration to medical school as soon as applications are accepted. In taking the fall MCAT, the student can pick up valuable science courses and other information which may prove to be an asset on the test.

An announcement booklet which contains an application blank and information about application deadlines, test dates, testing locations and sample questions is prepared annually. It is available through most pre-medical advisory offices and medical

school admissions offices, chemistry or biology departments, or by writing Medical College Admission Test, The Psychological Corporation, 304 East 45th Street, New York, New York 10017.

The best preparation for the MCAT is consistently good work in undergraduate courses. For review purposes, it is useful to know that the exam is divided into four separate parts.

- a. **GENERAL SCIENCE**—Review General Chemistry for several nights before the exam. For example, there probably will be one question on pH. Spend some time reviewing introductory Biology and introductory Physics.
- b. **MATHEMATICS**—A review of high school algebra and trigonometry should be enough.
- c. **VOCABULARY**—Take and study vocabulary tests as found in the various Medical College Admission Test review books. Many people find that vocabulary work cards also help here.
- d. **GENERAL INFORMATION**—The type of information is so "general" (current events, common sporting terms and trivia) that a good night's sleep before the test will do more good than an all-night cram session.

Scores made on the MCAT do not in themselves determine whether an applicant is admitted to medical school. They simply provide admissions committees with additional important information on the student's academic capabilities for the study of medicine and permit more thorough interpretation of his college record. This makes possible a more accurate prediction of a student's ability to complete the medical curriculum.

Summer between Junior and Senior Year

There are two ways in which a student can apply to Medical School: 1) through the American Medical College Application Service (AMCAS), or 2) through direct application to certain medical schools.

The Association of American Medical Colleges has developed a centralized application service, the American Medical College Application Service (AMCAS). Of paramount value to the applicant applying to any of the participating medical schools is the need to submit only one application and one set of official transcripts to AMCAS regardless of the number of schools to which he is applying. AMCAS request cards may be obtained in the Registrar's Office, and in the Office of the Chairman of Chemistry or Biology Departments.

An AMCAS study indicated the proportion of medical school applicants accepted for enrollment increased as the number of applicants filed increased up to 6 or 7 applicants. Above 7 applications the percentage of acceptances leveled off and then decreased. Therefore, it is recommended that applicants apply to six or seven schools.

If, after submitting an application to AMCAS, an applicant decides to apply to an additional school(s), he need only inform AMCAS of the additional school(s) and remit the additional service fee. No additional Application or Academic Record Coding Form is necessary. The AMCAS Service Fee is charged the applicant according to the number of medical schools participating in AMCAS to which the applicant wishes to apply. The AMCAS Service Fee should not be confused with the application fee which the medical colleges charge.

Many medical schools have educational or admissions programs specifically designed for minority students. Minority students are defined as coming from any ethnic, racial, or socioeconomic group currently under-represented in the field of medicine. If you believe you may qualify for such programs, it may be to your advantage to identify yourself in some manner on the "Personal Comment" page of the AMCAS Application for Admission.

For medical schools which DO NOT participate in AMCAS, one should send typewritten letters to these particular schools asking for an application blank as well as a catalog. Completed applications should be mailed by the end of the summer.

Most complete applications to medical schools include the following:

- a. The application itself—some also have a pre-application.
- b. A possible application fee. Note: Some schools will waive the application fee upon request, so do not hesitate to ask for a fee waiver.
- c. MCAT Scores
- d. Official transcript of grades
- e. Pre-medical evaluation recommendation or three letters of recommendation from professors in the basic sciences.

The admissions committees are equally concerned with the important personal factors of character, self-reliance, initiative,

motivation, perseverance, depth of purpose, breadth of interests and other traits which may not be reflected in grade averages. These personal characteristics are evaluated during interviews and through reports from undergraduate colleges, application forms and autobiographical sketches.

The Psychological Corporation will send out MCAT Scores to six schools free of charge if requested when the test is taken. (\$2.00 each additional school.) The transcript must be mailed separately for each school. The Admissions and Records Office (for a small service charge) will mail transcripts to each school.

Next fall, the only remaining item should be the fall MCAT (if not taken in the spring) and the interviews with the pre-med evaluation committee and the schools themselves. Be sure to request interviews with the pre-med committee early.

Senior Year

Select all the schools where the student intends to apply. Early application is important because it:

- a. Increases chances of acceptance (most schools consider the applicants in the order in which the completed applications are received and fill the class as they proceed).
- b. Give the student time to concentrate on courses.

The Interview: Most schools request one interview after they accept an application. If they request one, it is a good sign. It shows the student is still being considered. Pay particular attention to appearance. Be alert and responsive and answer questions completely. The only way to make a favorable impression is to be honest, relaxed, straightforward. Normally, good advice would be do not be too aggressive, while on the other hand, do not be too passive. DON'T BE AFRAID TO QUESTION THE INTERVIEWER, ESPECIALLY ABOUT THE MEDICAL SCHOOL.

Most interviewers are concerned with the student's interests and activities and on what basis the decision to study medicine was made. Be ready to explain why you are interested in this particular medical school. Keep up with most significant current news events.

NOTE: Some medical schools will pay the cost of an interview based on the individual needs of the student. Therefore, do

not hesitate to ask the school to pay for the interview if the student might qualify. Also, since the interview is normally at the medical school itself, take this opportunity to tour the school. If possible, be sure to talk with many medical students.

After the interview, the application is complete. Medical schools vary greatly as to dates of decision. Hopefully, it will be a favorable one.

Section E. Special Indian Programs

Fortunately, there are many special programs for American Indian students considering a health career. The success of these programs indicates they serve very important functions. For many Indian health professionals, the greatest development of their career decision occurred through their participation in these special programs.

Some programs are designed to identify and to stimulate potential Indian health professionals. Other programs introduce the prospective student to the daily experience of the practicing health professional. Still, other programs assist students through concentrated studies of a remedial or advanced nature depending upon their level of need. Among the various programs, some are available to students in the seventh grade, while others may only be available to Indians already accepted into medical school. At the present time virtually all programs can provide financial assistance to students who need such support.

Students who might enjoy or need these special programs should inquire and obtain further information by writing the organizations listed below:

Health Careers Summer
Program
Harvard Summer School
Department HC
1350 Massachusetts Avenue
Cambridge, Massachusetts
02138

Summer Program
Association of American
Indian Physicians, Inc.
1300 McGee Drive, Suite 103
Norman, Oklahoma 73069

INMED Program
University of North Dakota
Grand Forks, North Dakota

Upward Bound
c/o Nearest College

Association of University
Programs in Hospital
Administration
Attn: Office of Student Affairs
Suite 420, One Dupont Circle
Washington, D.C. 20036

Southeastern State College
Science Research Training
Programs
Durant, Oklahoma 74701

Navajo Health Authority
P. O. Box 643
Window Rock, Arizona 86515

Career Opportunities in the
Health Sciences
Department of Microbiology
University of Oklahoma
Health Sciences Center
Oklahoma City, Oklahoma
73190

Nurses Recruitment Program
Great Lakes Inter-tribal
Council, Inc.
P. O. Box 5
Lac Du Flambeau, Wisconsin
54538

Colorado State University
College of Veterinary Medicine
Department of Clinical Sciences
Fort Collins, Colorado 80521

Navajo Nation Health
Foundation
Ganado, Arizona 86505

National Science Foundation
1800 G Street, N.W.
Washington, D.C. 20550

Summer Institute: Health
related professions for
College Students
Indiana University
Bloomington, Indiana 47401

Headlands Summer Program
American Indian Institute
University of Oklahoma
Norman, Oklahoma 73069

Section F. Financial Planning

The study of medicine or the health career of one's choice is an expensive undertaking; yet with careful, long-range planning, commitment and resolve these health education costs can be met from the resources available to each student. The financial plan appropriate to each student's needs will, of course, vary from individual to individual. For some, the resources of the family, the tribe and summer employment may be sufficient. Yet, for others, grants, fellowships, awards and scholarships may be utilized. Most students attending college require some form of financial assistance in order to be able to attend the college or university of their choice.

Whatever the plan, it must be carefully and fully developed, taking into consideration the length of the educational program, the degree requirements, the capacity of the student, the financial resources of his family, how much money a person will earn after graduating, and the scholarship abilities of the student. Such planning is of great importance.

Unlike the high schools from which most American Indians graduate, colleges and other institutions of higher learning charge fees and assess costs to each student for his educational program. The rules, fees, and costs are normally described in a bulletin regularly distributed by each school, and each student is billed for his expenses before classes start. When he registers for his classes, the student will complete his financial arrangements with the school. This arrangement usually involves a debt by the student, but it is treated no differently than any other debt.

Preparation to obtain financial aid should begin as soon as possible. The process is long and time consuming, so the student should begin early and not become discouraged.

- When you write for a college admissions application and catalog, be sure to request a financial aid application.
- Write to all other known sources of financial aid to request applications.
- Fill out the application form completely and mail it in before the deadline.
- Most colleges/universities will ask each financial aid applicant and his parents to fill out either a Parent's Confidential Statement (PCS) or a Family Financial Statement (FFS). Some form of financial statement is always required for aid. These are used to determine the amount of aid needed to attend college. The PCS and FFS forms should be available from high school counselors or college financial aids offices.
- Upon receipt of your application, the financial aid officer will review all the information. If awarded aid, the student will be notified of the type of aid available. The student must then examine the aid package and either write accepting it or requesting a change.

Grants

Grants available for health education expenses are often scholarships, fellowships or other grants-in-aid. In some instances, these grants are given as awards in recognition of student talents. Sometimes these awards are sufficient to cover the costs of an entire four-year program. In other instances, the grants may cover only a portion of the total costs.

Federal Sources

The federal government sponsors campus-based student aid programs. Ask the Office of Financial Aid for eligibility requirements for each of the following programs:

1. Supplemental Educational Opportunity Grant (SEOG)—A non-repayable grant by the school to assist undergraduate students who have an exceptionally high financial need and are carrying at least one-half of a normal academic load. A student can receive no less than \$200 and no more than \$1,500 per year. Apply at the Office of Financial Aid.
2. National Direct Student Loan (NDSL)—A federal program to provide needy students with a long-term, low-interest loan for educational purposes. To qualify for NDSL, a student must carry at least one-half of the normal course load as defined by the school. The school determines who is eligible and the amount of the loan. During the first two years of undergraduate study, a student may borrow up to \$2,500 in NDSL with not more than \$5,000 accumulated during the years of undergraduate work. Repayment begins nine months after the student ceases at least half-time study. Apply at the Financial Aid Office.
3. College Work-Study—A federal program which provides part-time jobs for students with a demonstrated financial need. Jobs are available on-campus or off-campus with a public or private, non-profit agency. A student can earn up to \$600 and \$1,000 per year; the amount a student earns is dependent upon the wage scale and the number of hours he is able to work. Apply at the Financial Aid Office.
4. Federally Insured (or Guaranteed) Student Loan (FISL)—A long-term, low-interest (7%) loan from a bank. Students must apply through a participating lending institution such as banks, credit unions, savings and loan associations, and some other private organizations. Applications are available from participating lending institutions and financial aid offices.

One of the best sources of financial aid is a federal program called the Basic Educational Opportunity Grant (BEOG). The Basic Grant is a direct grant from the government based on need; the Basic Grant is an entitlement. If accepted as at least a half-time student at an eligible institution, a student can receive up to \$1,000 per year but, Basic Grant payments cannot exceed one-half of the costs of education. Special BEOG applications are

available at high schools, community agencies, libraries, and colleges, application forms are available now. It is suggested the student apply for the Basic Grant in February.

"State Sources"

"State

In addition, the college may have its own scholarship program or participate in a state-sponsored program. Some states have special aid programs for Indian students, i.e., ARIZONA, ALASKA, FLORIDA, KANSAS, MINNESOTA, MONTANA, NEBRASKA, NEW YORK, NORTH DAKOTA, SOUTH DAKOTA, and WISCONSIN. Since these programs and their regulations will vary, write to the Office of Financial Aid or the State Department of Education (located in the capital of each state) for further details.

There are other federal and state level programs which might be worth checking on. For specific information contact the local office of:

1. Veterans Education Benefits (G.I. Bill)
2. Social Security Benefits
3. Vocational Rehabilitation Funds; and,
4. Aid to Dependent Children

"Bureau of Indian Affairs Higher Education Grant Program"

In conjunction with making application to the resources as suggested in this section, be sure and apply for the Bureau of Indian Affairs and Tribal sources of aid. Usually, all necessary information and application forms are available from agency or tribal offices. If they do not have the needed information, they will provide the proper address. With the increasing number of Indian students entering college, the demand for Bureau grants is also increasing. Apply early for BIA or Tribal funds—early means in April or May of the year the student plans to attend college.

"Private Sources"

Scholarships and grants are also provided for by the private, religious, and business sectors of the community; civic and church groups, corporations, foundations, and professional associations set up aid programs to assist American Indians, Blacks, Mexican Americans, Veterans, Catholics, women, etc.) or to assist students with a particular career interest. There are scholarship guides in

the school or public library which will list aids of this type. Write to the ones that seem more applicable to the student's situation.

General Words of Advice

As mentioned earlier in the article, the process of applying for financial aid can be confusing and time-consuming. Just keep in mind that in order to get money for a college education, the student must apply for it. To apply early or on time increases the chances of getting a fair financial aid package. Applying for aid in the middle of the academic year can be disappointing, since many institutions and agencies are out of funds and are unable to provide any aid. There are people ready to assist in the application process. The following resource people will be able to help:

1. High school counselors;
2. Talent Search counselors;
3. Upward Bound personnel;
4. BIA scholarship officers or education specialists;
5. Staff people on Native American Education programs on a college/university campus; and,
6. Institutional financial aid and admissions personnel.

Preliminary Budget Preparation

A Student Preliminary Budgeting Form is printed in the following page for the student to use to estimate his budget plans. This form should be retained for future reference. This will save considerable time in the future when making scholarship applications. The left column contains many elements of cost as a reminder to prevent overlooking a significant expenditure. Should other costs exist, the blank lines should be used for additional items. It is important to include everything, so adequate consideration may be given to the exact amount of assistance required.

In the right column there are sources of funds listed. The first section covers amounts available without further solicitation. For example, if one's tribe or pueblo has a scholarship program, this source should be exhausted first. Since this type of program is limited to specific tribal members, an equitable distribution of all funds to applicants from all tribes is difficult. Priorities of every program may also have a bearing on the eligibility of the applicant. In view of these problems, our current recommendation for financial assistance should follow this priority.

THIS BUDGET APPLIES TO:

41.

DATE: FROM _____ TO _____

EXPENSES	MONTH	YEAR	MONTH	YEAR	INCOME
TUITION AND FEES PER: SEMESTER \$ _____ / YEAR \$ _____ QUARTER \$ _____ / YEAR \$ _____ TRIMESTER \$ _____ / YEAR \$ _____ BOOKS AND SUPPLIES \$ _____ BOARD \$ _____ RENT \$ _____ UTILITIES \$ _____ TRANSPORTATION (TO AND FROM CLASSES ONLY): MILEAGE @ 15¢ PER MILE \$ _____ PERSONAL EXPENSES CLOTHING, LAUNDRY \$ _____ SCHOOL PROFESSIONAL DUES \$ _____ MEDICAL-DENTAL \$ _____ (IHS COVERAGE; CHECK LOCAL PHS OFFICE ON RESERVATION OR NEAREST AGENCY OFFICE) CHILD CARE @ \$100 PER MONTH \$ _____ TOTAL \$ _____					INCOME PERSONAL FUNDS _____ PRIVATE LOANS _____ SUMMER EARNINGS _____ PARENTAL SUPPORT _____ SPOUSE'S SUPPORT _____ SCHOLARSHIPS RECEIVED _____ TRIBAL _____ UNIVERSITY _____ TUITION WAIVER _____ PROFESSION _____ FELLOWSHIP _____ CHURCH _____ OTHER _____ VETERANS BENEFITS _____ WELFARE BENEFITS _____ SOCIAL SECURITY _____ ALIMONY _____ PART-TIME JOB _____ OTHER INCOME _____ TOTAL \$ _____

1. Student earnings.
2. Family (spouse) earnings.
3. Parents.
4. Tribe.
5. BIA agency.
6. College or university financial aids.
7. College or university tuition waivers to Indians.
8. Indian scholarship organizations.
9. Professional associations of selected profession.
10. Foundations - churches, other

Where to Apply

The list, to some extent, is endless. Nevertheless, the handbook describes below those various agencies that may be able to provide financial assistance or information about available financial assistance. All possibilities should be carefully considered. Yet, the list is not exhaustive and the student should be mindful of any new or additional resources which may develop from time to time.

Generally, one should seek guidance and counseling in this matter. One should also begin with those institutions perhaps closest to his life--his tribe, his community organizations, his selected college, his local medical or health agency, his state, his church, etc. Special resources available to American Indian students can be obtained from the following sources:

The Scholarship Office
(Student's Tribe)
Care of Tribal Headquarters

Bureau of Indian Affairs
Care of Agency Superintendent
(Student's Agency)

American Indian Scholarships,
Inc.
211 Sierra, S.E.
Albuquerque, New Mexico 87108

Association of American
Indian Physicians, Inc.
1300 McGee Drive
Norman, Oklahoma 73069

United Scholarship Service Inc.
P. O. Box 18285
Denver, Colorado 80218

Office of Student Affairs
Navajo Health Authority
P.O. Box 643
Window Rock, Arizona 86515

General sources available to all students include the following:

State of Alabama Board of
Medical Scholarship Awards
1919 Seventh Avenue South
Birmingham, Alabama 35233

Joseph Collins Foundation
One Chase Manhattan Plaza
New York, New York 10005

State Medical Education Board
Of Georgia
244 Washington Street, S.W.
Room 468
Atlanta, Georgia 30334

Marcus and Theresa Levie
Educational Fund
One South Franklin Street
Chicago, Illinois 60606

National Medical Fellowship,
Inc.
3935 Elm Street
Downers Grove, Illinois 60515

Nevada State Medical Association
3660 Baker Lane
Reno, Nevada 89502

Max C. Fleishmann Foundation
Medical Education Grants
Nevada State Department of
Education
Carson City, Nevada 89701

New England Board of Higher
Education
40 Grove Street
Wellesley, Massachusetts 02181

Dr. Jonas E. Salk Scholarship
New York City Board of
Higher Education
535 East 80th Street
New York, New York 10021

The University of the State of
New York
The State Educational Department
Regents Examination and Scholar-
ship Center
99 Washington Avenue
Albany, New York 12210

Armed Forces Health Profes-
sions Scholarship Plan
Department of Defense
Assistant Secretary of Defense
for Health Environment
The Pentagon
Washington, D.C. 20301

Family Practice Scholarship
Subcommittee
Ohio State Medical Associa-
tion
17 South High Street
Columbus, Ohio 43215

Navy Scholarship Plan
Public Affairs Officer
Bureau of Medicine and Surgery
Department of the Navy
Washington, D.C. 20390
Attention: Code 3174

Mabel Wilson Richards
Scholarship Fund
1977 DeMille Drive
Los Angeles, California 90027

Southern Regional Education
Board
130 Sixth Street, N.W.
Atlanta, Georgia 30313

Office of Medical Manpower
New York State Department of
Health
84 Holland Avenue
Albany, New York 12208

The Commonwealth of Massa-
chusetts Board of Higher
Education
Medical School Scholarship
182 Tremont Street
Boston, Massachusetts 02111

John A. Brennecke Loan Fund
The Aurora Foundation
P.O. Box 671
Aurora, Illinois 60507

American Medical Association
Education & Research
Foundation
535 North Dearborn Street
Chicago, Illinois 60610

Educational and Scientific Trust
of the Pennsylvania Medical
Society
20 Erford Road
Lemoyne, Pennsylvania 17043

Student Loan Fund
General Executive Board
Presbyterian Church in the
United States
341 Ponce de Leon Avenue, N.E.
Atlanta, Georgia 30308

Scanlon Medical Foundation/Iowa
Medical Society
1001 Grand Avenue
West Des Moines, Iowa 50265

Albert Strickler Memorial Fund
1006 Lafayette Building
Philadelphia, Pennsylvania 19106

American Medical Women's
Association, Inc.
1740 Broadway
New York, New York 10019

Berkshire District Medical
Society
741 North Street
Pittsfield, Massachusetts 01201

Fellows Memorial Fund
Dr. T. Felton Harrison,
Consultant
Pensacola Junior College
1000 College Boulevard
Pensacola, Florida 32504

General Electric Company
1285 Boston Avenue-24EE
Bridgeport, Connecticut 06602

Grand Street Boy's Foundation
131 West 56th Street
New York, New York 10019

Mediclinics Educational Fund
Medical Student Loan Program
930 Northwestern Bank Building
Minneapolis, Minnesota 55402

Minority Student Information
Office
Care of Associate Dean
(The Medical School of Student's
Choice)

The College or Graduate School
of One's Choice

The Office of Education
(The Student's Home State)

National Merit Scholarship
Corporation
990 Grove Street
Evanston, Illinois 60201

Science Talent Search
1719 N Street, N.W.
Washington, D.C. 20006

National Honor Society
National Association of Secondary School Principals
1201 Sixteenth Street, N.W.
Washington, D.C. 20006

"Higher Education Benefits"
State Department of Education
Your State of Residence
(Applicable in most states)

The Association of American
Medical Colleges
One Dupont Circle, N.W.
Washington, D.C. 20036

Sources of additional information about financial planning include the following:

1. Educational Scholarships, Loans, and Financial Aids. Washington, D.C.: Dept. of the Army, Office of the Adjutant General, Pamphlet No. 352-1, 1972.
2. Feingold, S.N. Scholarships, Fellowships and Loans. Vol. V. Arlington, Massachusetts: Bellman Publishing Co., 1972.
3. Financial Information National Directory/72: Health Careers. Chicago: American Medical Association, 1972. (\$2.95)
4. Fine, Benjamin and Eisenberg, Signey A. How To Get Money for College (New York: Doubleday, 1964.
5. The Public Health Scholarships Program. Bethesda, Maryland: U.S. Dept. of Health, Education, and Welfare, Public Health Service, Publication No. 72-279, revised April 1972.
6. The Health Professions Student Loan Program. Bethesda, Maryland: U.S. Dept. of Health, Education, and Welfare, Public Health Service, Publication No. 72-276, revised April 1972
7. How Medical Students Finance Their Education. Washington, D.C.: U.S. Department of Health, Education, and Welfare, Public Health Service, Publication No. 1336-1 1970.
8. Keeslar, Oreon. Financial Aids for Students Entering College. Dubuque, Iowa: William C. Brown Co. 1970.
9. Keeslar, Oreon. A National Catalog of Scholarships and Other Financial Aids for Students Entering College. (Wm. C. Brown Co., 1969).
10. Scholarships Offered by Labor Unions. (1972-73 ed) Moravia, New York: Chronicle Guidance Publications, 1972. (\$2.00)
11. A Selected List of Major Fellowship Opportunities and Aids to Advanced Education for United States Citizens. Washington, D.C.: National Academy of Sciences, National Research Council, 1970. (Write to Fellowship Office, National Research Council, 2101 Constitution Ave., N.W. Washington, D.C. 20418.)

12. A Chance to Go to College.
New York: College Entrance
Examination Board, 1971
248 pp.
13. "A Letter to Parents: Finan-
cial Aid for College, 1970-71.
Margolius, Signey. New York:
College Entrance Examination
Board, 1970, 10 pp.
14. Complete Planning for College.
Sulkin, Sidney. New York,
Harper & Row, Publishers,
1968, 324 pp.
15. Financial Aid for Higher
Education. U.S. Office of
Education, Washington, D.C.:
Government Printing Office,
1968, 110 pp.



PART IV

WHERE TO OBTAIN ADDITIONAL ASSISTANCE

The contents of this handbook are in many ways only the beginning. Much additional assistance will from time to time be required by every student. As he progresses, each student will become better informed about additional resources and assistance. Consequently, this handbook will limit its recommendations for additional assistance. From these sources it is anticipated the student will proceed well along the trail to his health professions career.

Section A. Counseling and Advice

Throughout the time of his health career education each student will require and profit from additional counsel and advice. Every student should be prepared to constantly seek this advice. He should likewise be prepared to use this counsel and consider this advice very carefully. Whether as a graduate, American Indian M.D. contemplating a specialty practice in pediatrics, or whether as a college student considering humanities requirements necessary to a pre-veterinarian medicine curriculum, every decision will have serious and frequently lifelong consequences. It is important the fullest consideration, counsel and advice be given every major decision with the fullest possible help of one's friends, family and acquaintances.

One important source of assistance available to the Indian student is the practicing Indian health professional. As one who has gone before others he is incomparably prepared to offer advice. If a student knows such an individual, he should seek additional assistance from him. If a student does not know any such persons, he should feel free to write the Indian professional associations, such as the Association of American Indian Physicians. The members and staff of these organizations will be more than happy to assist. Other American Indian students, especially those studying for a health career, are very important sources of assistance. Frequently, valuable insight can be provided by those who are two,

three or even four years ahead of us. Thus, for example, American Indian medical students have pertinent and invaluable advice for Indian college students considering medicine as a career. In nearly every instance, these students have had to consider each issue or problem faced by other students. One should ask them what they did--how they resolved this particular matter. These students will be anxious to help.

Every student should also feel free to solicit the additional counseling resources of the various professional organizations and schools. These institutions are prepared to give guidance and advice. Every student should be prepared to seek this counsel, especially when he is uncertain about his choice, his place or other facts pertinent to his future.

All students should particularly understand that these professionals, students, organizations and schools do not usually know about the student or his particular needs unless someone brings them to his attention. Throughout the preparation for one's career, every student must realize that it is up to himself to seek this assistance. And when he receives advice, if it seems unclear, unwise or inaccurate the student should seek additional counsel from yet another source, not only to determine the veracity of the first-given advice but to assure the most careful career development.

There are, of course, many sources of wise counsel. The sources may seem limited or generous depending often upon the circumstances of the student himself. For some, such counsel can be obtained from tribal leaders, parents, public officials, and friends. For others, it may be necessary to seek out professionals who reside within the community; while they may not be trained in a health career they may know something about the student's decision or know others who may be able to provide help. The local minister, school superintendent or businessman may be such a person. Then, too, one may want to obtain additional information from other Indian leaders and professionals. In many ways, these individuals have perhaps had to consider similar or identical problems. Many times they will know another person better qualified to provide assistance.

Section B. Additional Sources of Information

At many times personal counsel and advice may neither be appropriate, available, accurate or desirable. In such instances, the student may desire to write or call agencies and organizations experienced in the field of his inquiry. Such agencies frequently receive requests for such information and are prepared to assist each student with his various needs. The student may wish to write for further information from the following organizations:

American Council on Education
One Dupont Circle, N.W.
Washington, D.C. 20036

Ameircan Society of Internal
Medicine
535 Central Tower Bldg.
307 Market Street
San Francisco, California 94941

American Society of Anesthe-
siologists
525 Busse Highway
Park Ridge, Illinois 60068

The College Admissions Center
801 Davis Street
Evanston, Illinois 60201

National Merit Scholarship
Corporation
990 Grove Street
Evanston, Illinois 60201

Science Talent Search
Science Clubs of America
1719 N. Street, N.W.
Washington, D.C. 20036

The American Medical Association
535 North Dearborn
Chicago, Illinois 60610

National Achievement Scholar-
ship Program for Outstand-
ing Negro Students
990 Grove Street
Evanston, Illinois 60201

National Honor Society
Scholarship Program
National Association of Second-
ary School Principles
1201 Sixteenth Street, N.W.
Washington, D.C. 20036

American Association of
Ophthalmology
1100-17th Street, N.W.
Washington, D.C. 20036

American Academy of Orthopedic
Surgeons
430 N. Michigan Avenue
Chicago, Illinois 60611

College of American Patho-
logists
7400 N. Skokie Blvd.
Skokie, Illinois 60076

American Academy of Pediatrics
1801 Hinman Avenue
Evanston, Illinois 60204

**The Association of American
Medical Colleges**
One Dupont Circle, N.W.
Washington, D.C. 20036

**American Medical Association
Education and Research foundation**
535 North Dearborn Street
Chicago, Illinois 60610

**American Medical Women's
Association, Inc.**
(Women students only)
1740 Broadway
New York, New York 10019

**American Academy of Family
Physicians**
1740 W. 92 Street
Kansas City, Missouri 64114

**American Indian Nurses
Assoc., Inc.**
2241 W. Lindsey, Suite 502
Norman, Oklahoma 73069

World Presbyterian Missions
901 N. Broom Street
Wilmington, Delaware 19806

**American College of Obste-
tricians & Gynecologists**
One East Wacker Drive
Chicago, Illinois 60601

American College of Radiology
20 North Wacker Drive
Chicago, Illinois 60606

American Hospital Association
840 North Lake Shore Drive
Chicago, Illinois 60611

American College of Surgeons
55 East Erie Street
Chicago, Illinois 60611

**Medical Assistance Programs, Inc.
of the Christian Medical
Society**
P.O. Box 50
Wheaton, Illinois 60187

Catholic Medical Mission Board
10 West 17th Street
New York, New York 10011

**Methodist Committee for
Overseas Relief**
475 Riverside Drive
New York, New York 10027

**Board of World Missions
Lutheran Church in America**
231 Madison Avenue
New York, New York 10016

**Medical Operations; Project HOPE
People-to-People Foundation**
2233 Wisconsin Avenue, N.W.
Washington, D.C. 20007

Medico (A Service of CARE)
2007 Eye Street, N.W.
Washington, D.C. 20006

Thomas A. Dooley Foundation
442 Post Street
San Francisco, California 94100

Laymen's Overseas Service
4920 Piney Branch Road, N.W.
Washington, D.C. 20011

The American Physical Therapy
Association
1156 15th St. N.W.
Washington, D.C. 20005

Department of Allied Medical
Professions and Services
American Medical Association
535 North Dearborn
Chicago, Illinois 60610

The American Occupational
Therapy Association
251 Park Avenue South
New York, New York 10010

American Scholarship Assn.
225 Park Avenue South
New York, New York 10003

The American Speech and Hearing
Assn.
9030 Old Georgetown Road
Washington, D.C. 20014

National Association of Social
Workers
2 Park Avenue
New York, New York 10016

The Registry of Medical Tech-
nologists
710 South Wolcott Avenue
Chicago, Illinois 60612

American Society for
Medical Technology
5555 W. Loop South, Suite 200
Houston, Texas 77401

American Society of Radiologic
Technologists
645 N. Michigan
Chicago, Illinois 60611

ANA-NLN Nursing Careers
Program
American Nurses Association
10 Columbus Circle
New York, New York 10019

Committee on Nursing
American Medical Association
535 North Dearborn
Chicago, Illinois 60610

National Association for
Practical Nurse Education
and Service
122 East 42nd Street
New York, New York 10017

National Federation of Licensed
Practical Nurses, Inc.
250 West 57th Street
New York, New York 10019

Department of Medicine and
Surgery
Veterans Administration
Washington, D.C. 20420

American College of Hospital
Administrators
840 North Lake Shore Drive
Chicago, Illinois 60611

The American Society of
Hospital Pharmacists
4360 Montgomery Avenue
Washington, D.C. 20014

The American Dietetic
Association
620 North Michigan Avenue
Chicago, Illinois 60611

American Home Economics
Association
1600 Twentieth Street, N.W.
Washington, D.C. 20009

American Chemical Society
1155 Sixteenth Street, N.W.
Washington, D.C. 20006

American Institute of
Biological Sciences
3900 Wisconsin Avenue, N.W.
Washington, D.C. 20418

American Dental Association
211 East Chicago Avenue
Chicago, Illinois 60611

American Association of
Dental Schools
211 East Chicago Avenue
Chicago, Illinois 60611

American Dental Assistants
Association
211 East Chicago Avenue
Chicago, Illinois 60611

American Dental Hygienists
Association
211 East Chicago Avenue
Chicago, Illinois 60611

Water Pollution Control
Federation
3900 Wisconsin Avenue
Washington, D.C. 20016

Medical and Health
Department of Defense
Washington, D.C. 20025

American Physiological
Society
9650 Rockville Pike
Bethesda, Maryland 20014

American Psychological
Association
1200 Seventh Street, N.W.
Washington, D.C. 20036

American Association for
Health, Physical Edu-
cation and Recreation
1201 Sixteenth Street, N.W.
Washington, D.C. 20036

National Tuberculosis
Association
1740 Broadway
New York, New York 10019

Society of Public Health
Educators, Inc.
419 Park Avenue South
New York, New York 10016

American Cancer Society
219 East 42nd Street
New York, New York 10017

American Heart Association
44 East 23rd Street
New York, New York 10010

American Society of
Biological Chemists
9650 Wisconsin Avenue
Washington, D.C. 20014

National Health Council
1740 Broadway
New York, New York 10019

Association of Medical
Illustrators
738 Keystone Avenue
River Forest, Illinois 60305

Medical Library Association
Palmolive Building
919 North Michigan Avenue
Chicago, Illinois 60611

American Psychiatric Associ-
ation
1700 Eighteenth Street, N.W.
Washington, D.C. 20009

The National Association
for Mental Health
1800 N. Kent Street
Arlington, Virginia 22209

The American Orthoptic Council
3400 Massachusetts Avenue, N.W.
Washington, D.C. 20007

American Podiatry Association
20 Chevy Chase Circle, N.W.
Washington, D.C. 20015

American Pharmaceutical
Association
2215 Constitution Avenue, N.W.
Washington, D.C. 20037

American Public Health
Association
1015 18th Street N.W.
Washington, D.C. 20036

U.S. Public Health Service
Public Inquiries Branch
Office of Information
Washington, D.C. 20025

Department of Health,
Education and Welfare
Vocational Rehabilitation
Administration
Washington, D.C. 20201

National Society for Crippled
Children and Adults
2023 West Ogden Avenue
Chicago, Illinois 60612

United Cerebral Palsy
Association, Inc.
66 East 34th Street.
New York, New York 10016

American Veterinary Medical
Association
930 N. Meacham Road
Schaumburg, Illinois 60172

Section C. Recommended Reading List.

To obtain additional information on ideas or inspiration about various health careers, the following reading list is recommended for American Indian students:

Becoming A Physician:

Atchley, Dana. Physician:
Healer and Scientist
(Macmillan, 1961).

Gregg, Alan. For Future
Doctors (University of
Chicago Press, 1957).

Bleich, Alan R. Your Career In
Medicine (Messner, 1964).

Medical School Admission
Requirements (Association of
American Medical Colleges,
published annually).

Burke, Betsy. The Life You
Save (McKay, 1962).

Nourse, Alan E. So You Want
to Be a Doctor (Harper &
Brothers, 1957).

Engemen, Jack. Doctor--His
Training and Education
(Lothrop, Lee and Shepard,
1964).

Starrett, Robert S. Find A
Career in Medicine (Putnam,
1960).

Fabricant, Noah D. Why We
Became Doctors (Grune &
Stratton, 1954).

Biographical and Historical:

- Ackerknecht, Edwin H. A Short History of Medicine (New York: Ronald Press, 1955).
- Atkinson, Donald T. Magic and Medicine (Cleveland, O.: World Publishing Co., 1956).
- Clapesattle, Helen. The Doctors Mayo (University of Minnesota Press, 1941).
- Crowther, J.G. Six Great Doctors: Harvey, Pasteur, Lister, Pavlov, Ross, Fleming (Hamish Hamilton, 1957).
- Cushing, Harvey. The Life of Sir William Osler (The Clarendon Press, 1925).
- Dietz, David. All About Great Medical Discoveries (New York: Random House, Inc., 1959).
- Guthrie, Douglas, M.D. History of Medicine (Philadelphia: J.B. Lippincott Co., 1958).
- King, Lester S., M.D. The Growth of Medical Thought (Chicago: University of Chicago Press, 1963).
- Leff, Samuel and Leff, Vera. From Witchcraft to World Medicine (New York: Macmillan Co., 1957).
- Peabody, Francis W. Doctor And Patient (Macmillan, 1939).
- Rich, Josephine. Doctor Who Saved Babies, Ignaz Philipp Semmelweis (Messner, 1961).
- Riedman, Sarah R. Portraits of Nobel Laureates in Medicine and Physiology (Abelard, 1963).
- Robbin, Irving. Giants of Medicine (Grossett, 1962).
- Shryock, Richard H. The Development of Modern Medicine (Knopf, 1947).
- Silverberg, Robert. Great Doctors (Putnam, 1964).
- Singer, C.J. A Short History of Medicine (Oxford University Press, 1928).
- Zinsser, Hans. Rats, Lice and History (Little-Brown, 1944).

Women in Medicine:

Alsop, Gulielma Fell. History of The Woman's Medical College of Pennsylvania, 1850-1950 (Philadelphia: J.B. Lippincott, 1950).

Bluemel, Elinor, Florence Sabin. Colorado Woman of the Century (Boulder, Colo.: University of Colorado Press, 1959).

Baker, Rachel M. The First Woman Doctor: The Story of Elizabeth Blackwell, M.D. (New York: J. Messner, Inc., 1944).

Fleming, Alice. Doctors in Petticoats (Lippincott, 1964).

Baker, Sara Josephine. Fighting for Life (New York: Macmillan, 1939).

Lovejoy, Esther C.P. Women Doctors of the World (New York: Macmillan, 1957).

Barringer, Emily Dunning. Bowery to Bellevue: The Story of New York's First Woman Ambulance Surgeon (New York: Norton, 1950).

Truax, Rhoda. The Doctors Jacobi (Boston: Little-Brown 1952).

Other:

Allen, Clifford. Planning A Career (New York: McGraw Hill, 1967).

Borland, Hal. When The Legends Die

American Hospital Association. Health Careers: Hospital Personnel Director (Chicago: The Association, 1968).

Granning, Harold M. "The Institution Needs of the Health Industry." Public Health Reports, Vol. 84 (April, 1969).

Bonnet, Paul D. Health Manpower Needs and Requirements for Health Service Workers (Washington, D.C.: Government Printing Office, 1967).

Kadish, Joseph. "Health Manpower Problems and Prospects." New Jersey Public Health News, Vol. 50 (March, 1969).

Miller, Samuel M. Breaking the Credentials Barrier. Presented at the American Orthopsychiatric Association Conference March 23, 1967. (Available by request from the Ford Foundation Office of Reports in New York City.)

Ross, Arthur and Herbert Hill. Employment, Race, and Poverty (New York: Harcourt, Brace and World, 1967).

United States Department of Health, Education, and Welfare, Public Health Service. Health Resources Statistics: Health Manpower and Health Facilities (Washington, D.C.: Government Printing Office 1968).

For more information on the opportunities available to American and Alaskan Indians in the Health Professions, we urge you to contact the:

Association of American Indian Physicians, Inc.

1300 McGee Drive
Norman, Oklahoma 73069
(405) 321-1122